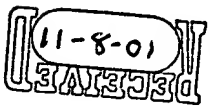


brought the Applicant's attention to U.S. Patent Nos. 4,211,497 to Montgomery and 5,574,482 to Niemeier, indicating that "consecutively arranged multi-letter words when read from left to right" is shown in Montgomery's Figure 12 and Niemeier's Figure 3. The Examiner also indicated that Chen reference (U.S. Patent No. 5,739,776) was considered to meet the limitations of claim 8 as noted in the final rejection, paragraph 8. The Examiner further mentioned Leu et al (U.S. Patent No. 6,084,576) indicating its potential applicability to the limitations of "a plurality of shift keys (98,99) located in a lower central portion of an array", and grouped "directly adjacent one another" and further referenced that they were "arranged in at least two multiple rows" as cited in claims 1 and 13, while noting Figures 34 and 38. Finally, the Examiner noted Kaplow et al. (U.S. Patent No. 3,913,721) stating that it may be considered to meet the limitations of "both tab (206) and backspace keys (198) being located in a row above the home row" as cited in claim 11 while referencing Figure 3 of the patent. Since the majority of these references are not currently of record, the Applicant specifically requests that the Examiner place these newly cited references on a Form 892 so that they may be printed on the front of any subsequent issued patent on this invention.

Currently, under the final rejection, claims 7 and 10 have been rejected under 35 U.S.C. §102(b) as being anticipated by Weeks (U.S. Patent No. 5,880,685); claims 13, 14, 15, 18 and 19 have been rejected under 35 U.S.C. §103 as being unpatentable over Russo (U.S. Patent No. 5,336,002) in view of Motoyama et al. (U.S. Patent No. 5,818,357); claim 20 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Russo (U.S. Patent No. 5,336,002) in the view of Montoyama et al. (U.S. Patent No. 5,818,357) and Wakatsuki et al. (U.S. Patent No. 5,065,003); claim 17 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Russo (U.S. Patent No. 5,336,002) in view of Motoyama et al. (U.S. Patent No. 5,818,357) and Maynard et al. (U.S. Patent No. 5,557,299); claims 1-6 have been rejected under 35 U.S.C. §103 as

being unpatentable over Weeks (U.S. Patent No. 5,880,685) in view of Motoyama et al. (U.S. Patent No. 5,818,357) and Choate (U.S. Patent No. 5,352,050); and, finally, claims 8-9 and 11-12 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Weeks (U.S. Patent No. 5,880,685) in view of Chen (U.S. Patent No. 5,739,776).

In response, Applicant has amended claim 2 to incorporate the limitations of claim 4. Specifically claim 2 now requires that "said letter keys arranged to spell out at least three, consecutively arranged multi-letter words when read from left to right". While it is true the Examiner has mentioned examples of two multi-letter words found in the prior art for example in Montgomery's Figure 12 (U.S. Patent No. 4,211,497) and Niemeier's Figure 3, (U.S. Patent No. 5,574,482), **none of the prior art of record discloses three such multi-letter words in a single row.** Certainly, the combination of Weeks, Motoyama and Choate as applied in the Final Office Action does not meet this requirement.

Additionally, Applicant respectfully disagrees with the Examiner's contention that it would be obvious to modify such references to reposition the keys without any teaching in the art. First of all, as specifically laid out in the Background of the Invention of the subject application, Applicant has shown that the position of keys is particularly important and does change a keyboard's function. For example, the Qwerty keyboard was specifically designed to slow down typists so that they would not jam manual typewriters. Other arrangements have been proposed to speed up typing. Clearly there exist a number of patents issued on keyboards based on the arrangement of the keys thereon. If this position of the Examiner were correct, there would be many invalid patents in this field. The current invention is generally designed to make it easy to learn to type and thus the positions of the keys are of great importance. This is in contradistinction to the case In Re Japikse, 86 SPQ70 (CCPA

1950) cited by the Examiner, specifically relating to a starting switch on a hydraulic power press. The moving of a starting switch in that particular instance did not modify the operation of the device. The moving of key positions on a keyboard does modify a keyboard's operation. It is assumed that the Examiner has a copy of this case and has reviewed the same. To this end, the Examiner's specific attention is drawn to page 73 of the opinion to support Applicant's position as set forth above. In any event, claim 1 and all the claims depending therefrom should be allowed since the prior art does not disclose or render obvious the concept of three multi-letter words in a single row of a keyboard.

In regards to independent claim 7, the Applicant has amended claim 7 to incorporate the limitations of claim 11. Specifically the claim now requires the typing array to have a home row and that both the tab and backspace keys are located in a row above the home row. In relation to previous claim 11, the Examiner argues that Chen ('776) teaches a keyboard tab key 15 in the same row of a backspace key 16. The Examiner then once again alleges that, since the function of the key would not be affected by changing the location of the key, the changing location of the key is considered obvious. In response, the Examiner is referred to the arguments above regarding the case of In re Japikse and, in addition, is reminded that changing a key's position on a keyboard can indeed represent a major change in the overall use of the keyboard. Finally, no motivation has been provided in the prior art to make such a change of location of tab and backspace keys as required by the claims now pending in this case. Of course, these arguments apply equally against Kaplow et al. (U.S. Patent No. 3,913,721) which, while showing tab and backspace keys located above a home row, does not show tab and backspace keys centrally located within the letter keys. See Figure 3.

Finally, in regards to claim 13, claim 13 has been amended to incorporate the limitations of claim 14. While the Examiner has noted that in Figure 38 of Leu et al. (U.S. Patent No. 6,084,576) two shift keys 98 and 99 are disclosed, none of the patents of record appear to disclose at least three separate shift keys located as required by claim 13. In Russo (U.S. Patent No. 5,336,002) for example, the shift keys are all located in a single row, while claim 13 requires the shift keys to be in at least two of the multiple rows. See Figure 3. Once again Applicant disagrees with the Examiner's position on changing the location of parts as simply being obvious without any teaching in the art, but those arguments will not be repeated a third time. In the interview summary, the Examiner has already indicated that claims 13-20 should be allowable based on the proposed change, along with claim 1.

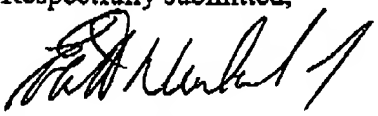
Given the changes made to independent claims 2, 7 and 13, combination claim 1 has been correspondingly amended. In addition, given the cancellation of claims 4 and 11, the dependencies of claims 5, 12 and 15-18 have been correspondingly amended.

CONCLUSION

Based on the above remarks, and the amendments made to the claims, it is respectfully submitted that the claims in this application are now in clear condition for allowance over the known prior art. Therefore, allowance of the claims and passage of the application to issue are respectfully requested. To this end, the assistance accorded by the Examiner in arriving at this appropriately defined invention as claimed is sincerely appreciated. Certainly, it is respectfully submitted that the Applicant has shown that the previously applied prior art did not meet the prior claimed limitations or the invention as now recited. Finally, it should be recognized that this amendment does not raise any new issues as the Applicant has simply taken

language from dependent claims and inserted the same into the corresponding independent claims. If the Examiner should have any additional concerns regarding the allowance of this application, the Examiner is cordially invited to contact the undersigned at the number provided below if it would further expedite the prosecution of this application.

Respectfully submitted,



Everett G. Diederiks, Jr.
Attorney for Applicant
Registration No. 33,323

Date: November 8, 2001
DIEDERIKS & WHITELAW, PLC
12471 Dillingham Square, #301
Woodbridge, VA 22192
Tel: (703) 583-8300
Fax: (703) 583-8301

Examiner Reference
09/534,474

I CLAIM:

1. (Twice Amended) A keyboard for use in performing typing tasks comprising:

a base having an upper side; and

a plurality of keys arranged in an array, including multiple rows **with one of the multiple rows being a home row**, on the upper side of said base, said keys including letter keys, a tab key, a backspace key, **[a plurality of] at least three** shift keys and at least one function key, each of said letter keys corresponding to a respective letter of an alphabet of a language, wherein said **[plurality of] at least three** shift keys are located in a lower central portion of said array, grouped directly adjacent one another, and arranged in at least two of the multiple rows, said **[plurality of] at least three** shift keys being adapted to be engaged by thumbs of a user, wherein one of said rows includes selected ones of said letter keys arranged to spell out at least **[two] three**, consecutively arranged multi-letter words when read from left to right and wherein both the tab and backspace keys are centrally located within the letter keys **and located in a row above the home row**.

2. (Twice Amended) A keyboard for use in performing typing tasks comprising:

a base having an upper side; and

a plurality of keys arranged in an array, including multiple rows, on the upper side of said base, said keys including letter keys, a tab key, a backspace key, at least one shift key and at least one function key, each of said letter keys corresponding to a respective letter of an alphabet of a language, wherein one of said rows includes selected ones of said letter keys arranged to spell out at least **[two] three**, consecutively arranged multi-letter words when read from left to right.

5. (Once Amended) The keyboard according to claim **[4] 2**, wherein the language is English and the three words comprise "READ", "ON" and "THIS".

7. (Twice Amended) A keyboard for use in performing typing tasks comprising:

a base having an upper side; and

a plurality of keys arranged in an array, including multiple rows **with one of the multiple rows being a home row**, on the upper side of said base, said keys including letter keys, a tab key, a backspace key, at least one shift key and at least one function key, each of said letter keys corresponding to a respective letter of an alphabet of a language, wherein both the tab and backspace keys are centrally located within the letter keys **and located in a row above the home row**.

12. (Once Amended) The keyboard according to claim [11] 7, wherein the tab key and the backspace key are located in a third row down from a top of said base.

13. (Twice Amended) A keyboard for use in performing typing tasks comprising:

a base having an upper side; and

a plurality of keys arranged in an array, including multiple rows, on the upper side of said base, said keys including letter keys, a tab key, a backspace key, **[a plurality of]** **at least three** shift keys and at least one function key, each of said letter keys corresponding to a respective letter of an alphabet of a language, wherein said **[plurality of]** **at least three** shift keys are located in a lower central portion of said array, grouped directly adjacent one another, and arranged in at least two of the multiple rows, said **[plurality of]** **at least three** shift keys being adapted to be engaged by thumbs of a user.

15. (Once Amended) The keyboard according to claim [14] 13, wherein the plurality of shift keys includes four adjacent shift keys.

16. (Once Amended) The keyboard according to claim [14] 13, wherein said plurality of shift keys are arranged in only two different rows on the keyboard.

17. (Once Amended) The keyboard according to claim [14] 13, wherein said at least three separate shift keys are color coded.

18. (Once Amended) The keyboard according to claim [14] 13, wherein two of said at least three separate shift keys perform identical functions.